



*Mile High Flyer*  
*The Official Newsletter*  
*of*  
*The Experimental*  
*Aircraft Association,*  
*Chapter 43*  
*Established May, 1958*



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*March, 2022*

### **President's Corner - by Chapter President Cliff Goldstein**

Bobbi's going to just kill me. More about that in a minute. I took a trip to Salida last month, you're all getting tired of hearing that, but on the way down, I noticed my fuel system changing flow on its own. The 14 uses electronic fuel injection with electronic ignition. The fuel system has two different computers, so I switched to the second ECU and things settled down. Of course, on the way home, it worked perfectly. I was flying to Carlsbad later in the month and suspected a vacuum leak in the manifold sensor. I checked the system, and it was secure. Now the fun part, where Bobbi's gonna kill me. I flew to Carlsbad couple of weeks ago, best flight out. Non-stop from Erie to Ontario (Just east of Long Beach) California. Stopped off to see Robert Paisley, the creator of the ignition fuel system. After I installed my system, he was already in the process of designing his new EFII System 32. Robert has been on me about upgrading to the new system for 2 years. Jeff Jones has it on his 14 and Aaron Miller (RV-8) has one of the first installations. Anyway, on the way out the #1 ECU fuel system was wandering around again, so I recorded all the data during the ride to show to Robert. As usual he knew exactly what the issue was and then launched into me regarding an upgrade. To make a very long story short, which is very difficult in my case, he went through all the features and benefits and why the new system fixes the problems in flight and tells you where the problem is. In this case, it was the temperature sensor which enriches fuel during start up. I was beginning to have start up issues with not enough fuel. I adjusted the start up enrichment cycle which solved the problem, but it came back. How could I say no to Robert with the screaming deal he offered? He promised a one-day installation for someone smart so I'm figuring a couple of weeks, but it allows for many improvements over the old system. Can't wait to sell Bobbi.....er maybe not.

I've had head winds on the way out and back to California but never favorable winds on the way out. The Wind Gods were definitely working with me this trip, with a nice smooth ride till I got to the valley. I also had an opportunity to try out my oxygen system for the whole ride. I took the whole trip at 12,500. After 5 hours and no yawns, what a plus and I felt good when I got there, not to mention shorts and a tee shirt.

It was awesome to see the mask mandates in Boulder and Jefferson Counties lifted. Seems like the Weld County folks have ignored the mandate for months. Nice to see your smiling faces, not to mention my personal return to the gym sans mask. Which brings us to our meeting this month at BJC 6:00pm Saturday, March 12th. I'm certainly looking forward to seeing everyone's smiling faces.

We have a special guest this month. Paul Anslow, the airport director at Jeffco, will start our program out. He volunteered to make a presentation to our chapter about what is and will be happening at RMMA. Stan invited Paul to present at our March meeting, which he accepted. Stan also asked him to share some of his experiences while flying as a pilot in Marine One for Presidents Clinton and Bush. Paul is very engaging, and I think you'll all enjoy hearing him speak.

In the 3rd half of the hour, we will be showing the video from the 2021 Memorial Wall Celebration at AirVenture at which time our own Chuck Graf, Lifetime Chapter Member, was honored. Following the showing, Stan has asked Chuck's son, Mark Graf, and other Graf family members to offer their comments as a memorial summary of our beloved chapter member.

Again, I look forward to seeing you all there.

### **Next Gathering - Saturday, March 12, 2022, 6pm**

**6 PM @ the Mount Evans Room in the Terminal Building at RMMA (BJC)**

*Program by RMMA Director Paul Anslow*

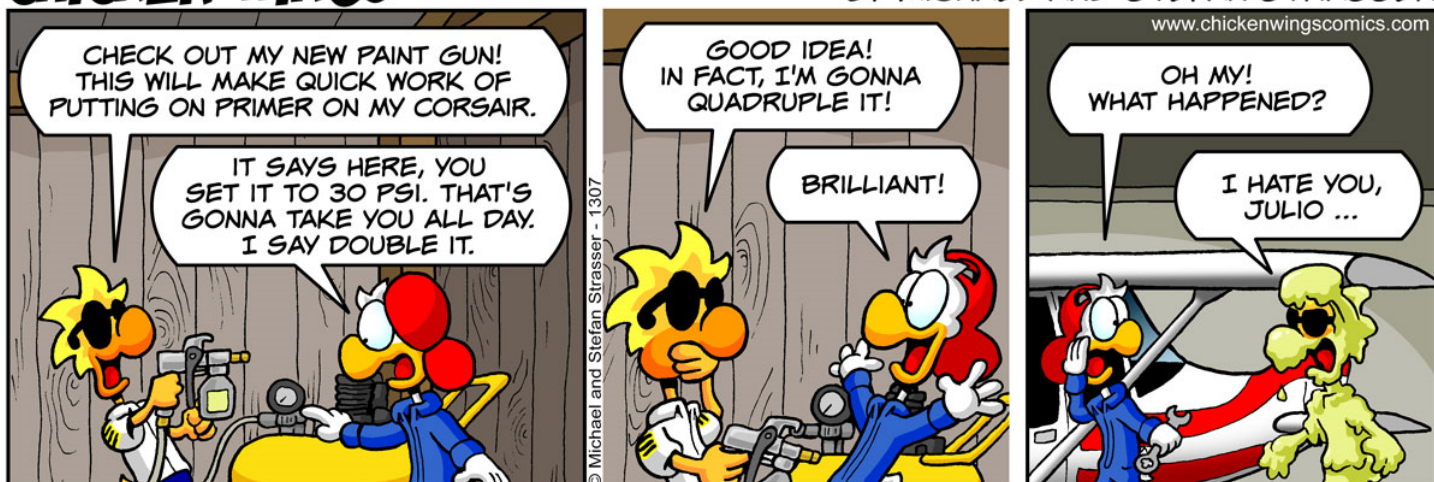
Paul will present what is and will be happening at RMMA, and will also share some of his experiences piloting Marine One for Presidents Clinton and Bush. In the second half of the hour, we'll watch video from the AirVenture 2021 Memorial Wall Ceremony, which honored our own Lifetime Member, Chuck Graf. Several members of the Graf family, including his son Mark, will add their comments

#### **In this issue:**

- Title pic - March Madness! Not basketball, but an RC Custom Plane Challenge. Click on the photo which is linked to a YouTube video introducing the event. Got a cool RC of your own? You still have until March 11 to enter!
- Here's a question for you builders, have you fudged the recommended pressure to shorten the time spent priming or painting your project? How'd that work for you? See this month's Chicken Wings below.
- One of the requirements for this year's Ray Scholarship was interviewing previous Chapter scholarship winners. Find Edward Gibson's interview with 2018 Cleon Biter Scholar Mitchel Johnson on page 5!
- Jeff Jones submitted an awesome article on what the Young Aviators are up to, see page 6!
- Since I don't have a second set of eyes to review the newsletter, I'd like to ask all of you to help find my boo-boos for cookies! Let me know at [newsletter@eaa43.org](mailto:newsletter@eaa43.org). Then come to the next live chapter meeting for your cookies! If you'd like to contribute calendar event, a newsletter article on a trip, a tool, component, or aircraft review, a how-to for build or test, historical or ANYTHING airplane or chapter related, don't be shy. You can email [newsletter@eaa43.org](mailto:newsletter@eaa43.org) with anything ya got in electronic format, or hand me a hardcopy. Gmail limits attachments to 25MB, so if it's bigger than that, try multiple emails, Dropbox, Google Drive, etc.

## **CHICKEN WINGS®**

BY MICHAEL AND STEFAN STRASSER



## ***Upcoming Events Calendar***

### **2022 CHAPTER EVENTS**

#### **MARCH**

- Tue 8 Chapter 43 VMC Club, 6 PM, live and virtual, contact [andresmith76@outlook.com](mailto:andresmith76@outlook.com)  
 Sat 12 Chapter Meeting at the Mt. Evans room at BJC, 6 PM  
 Sat 19 EAA Chapter 43 Young Eagles Rally, EIK, 7:45 AM  
 Thu 24 Chapter 43 IMC Club, 6 PM, live and virtual, contact [llearnsh@gmail.com](mailto:llearnsh@gmail.com)

#### **APRIL**

- Sat 9 Annual Awards Banquet at the Mt. Evans room at BJC, 5:30 PM (see below)  
 Tue 11 Chapter 43 VMC Club, 6 PM, live and virtual, contact [andresmith76@outlook.com](mailto:andresmith76@outlook.com)  
 Sat 16 EAA Chapter 43 Young Eagles Rally, EIK, 7:45 AM  
 Thu 28 Chapter 43 IMC Club, 6 PM, live and virtual, contact [llearnsh@gmail.com](mailto:llearnsh@gmail.com)

### **2022 AREA EVENTS**

#### **MARCH**

- Mon 14 Chapter 648 Meeting, 7 PM <https://chapters.eaa.org/ea648>  
 Wed 16 Chapter 1627 Meeting, <https://chapters.eaa.org/ea1627/about-us>  
 Fri 18 Chapter 301 Meeting, 7 PM (6:30 social) <https://www.eaa301.org/newsletters>

#### **APRIL**

- Sat 2 Breakfast Fly-In/Drive-In, Centennial Airport, 13005 Wings Way, Englewood CO, 8AM  
<https://explorationofflight.org/event/breakfast-fly-in-april/>  
 Mon 14 Chapter 648 Meeting, 7 PM <https://chapters.eaa.org/ea648>  
 Wed 16 Chapter 1627 Meeting, <https://chapters.eaa.org/ea1627/about-us>  
 Fri 18 Chapter 301 Meeting, 7 PM (6:30 social) <https://www.eaa301.org/newsletters>

### **ANNUAL AWARDS BANQUET - John Evens**

Our annual banquet and April Chapter meeting are scheduled for April 9, 2022 in the Mt. Evans room in the terminal building at RMMA (our normal meeting location). First arrivals at 5:30 PM with food served at 6:00 PM.

Suggested attire is casual. It will be a buffet style meal, with beef, chicken and vegetarian options. Limited libations will be available for a donation, and soft drinks, tea and coffee are included. There will be musical entertainment and special Master Pilot awards for some of our members who have been flying for at least 50 years, presented in person by the FAA. Seating is limited to around 80 attendees with ~60 already signed up, so you are encouraged to sign up right away on our website at <https://chapters.eaa.org/ea43/banquet>, or by clicking on "Banquet" on the homepage. There you can list your meal preferences, number of attendees, and make a payment of \$25 per attendee via PayPal if desired, or download a reservation form to turn in with a check to the March meeting or mail in with a check if that's your preference. Mail to the Chapter 43 mailbox; address is on the last page of this newsletter! Reservations are requested by April 2 to allow time for our caterer to order food.

If you have already registered and are unable to attend the April 9 date, please contact Treasurer Myles Lee at [nila\\_myles@msn.com](mailto:nila_myles@msn.com) to A) request a refund, B) apply your \$25 per attendee to extend attendees' dues an additional year, or C) apply your \$25 per attendee to the Chapter 43 Scholarship Fund.

## **Pilatus Tours - Steve Beach**

Chapter tours are still on hold, but Steve and Mark are organizing a visit for the Young Aviators.



Hi Volunteers,

I sent out notices of the March 19 Rally through the [Young Eagles Day website](#). If you are registered on the YED website and didn't receive the E-mail, check your Junk Folder.. The registration for the Rally opened February 19 and in 6 days we have 35 kids registered and registration is closed. 31 kids are first timers. 10 pilots that are on the YED website have problems with either Membership or Youth Protection Policy. This is the year most of us need to take care of the YPP and Background checks. I've heard from 5 Pilots and 2 so far can fly. I would like as many planes as possible and get back to flying kids in the co-pilot seat.

Pilots and Volunteers, please register on the Young Eagles Day website if you haven't already. The YED website takes the workload off of the Volunteers on Rally days. For example, the flight certificates are automated once a Pilot and Child are selected. The Certificate is printed pulling the information from the website. I can't express enough the benefits in time savings.

If you can fly let me know.

Best Regards,  
Clifford Hasenbalg  
EAA Chapter 43  
Young Eagles Coordinator  
303-359-2758 c  
Facebook – Young Eagles EAA Chapter 43

### **Chapter Name Tags**

Want an official chapter name tag? See Herrill Davenport (the guy behind the laptop running the meeting A/V system). Payment to Herrill is requested before the tags are ordered - \$8.00 for a pin fastener or \$9.00 for a magnetic fastener. He'll have your name tag at the next meeting!



### **Membership Renewal - If you haven't already...**

Chapter 43 offers an annual membership for \$25 or a 5-year membership for \$100. Renew at <https://chapters.eaa.org/~link.aspx?id=447A2461EDEF4A3AB0D7BEB6026A899B&z=z> with a credit card or PayPal account. If you need to update your information, select a payment option titled "Renewed With Changes" and either wait for the Data Base Manager to email you a Membership Application or download the Application from the above webpage, fill it out, and bring the form to the next live meeting. If you wish to pay by check, you can bring it to Treasurer Myles Lee at the next live meeting or mail it to EAA Chapter 43 at the address on the last page of the newsletter.

### **New Social Media Coordinator John Kellogg!**

John will be administering Chapter 43 accounts on Facebook, Instagram, and Twitter, but he needs content! Please send Chapter announcements and project/flight/event pictures and stories to him at [johnkellogglys@gmail.com](mailto:johnkellogglys@gmail.com). Links to the Chapter Facebook and Twitter accounts have been added just under "Welcome to Chapter 43" on the Chapter's homepage at [www.eaa43.org](http://www.eaa43.org). If you select the Instagram logo in the same area, it will take you to [instagram.com](http://instagram.com) where you can type in the handle @eachapter43! If you're already on Facebook you can find the Chapter 43 accounts by searching for EAA Chapter 43 or @EAA43. If you're already on Twitter, search for @eachapter43.

# Meet Mitchell Johnson, the 2018 Biter Scholar

Interview by Edward Gibson; EAA Ray Aviation Foundation Scholar 2021



Mitchell Johnson was awarded the Biter Scholarship in 2018. He started his training at Centennial Airport then switched to Northern Colorado Regional before it had a tower. He has completed his Private Pilot License and his Instrument rating and is currently working on his Commercial.

## **How was your flight training experience? What did you like/didn't like?**

He first started training at Centennial Airport; however, he didn't like his instructor. He said that his first instructor was only teaching to build hours. He then went to Northern Colorado Regional Airport and trained there, before there was a tower. He really liked his second instructor because he made sure that he was building good habits and was very knowledgeable.

## **What advice can you share for people just starting their flight training?**

He said "Don't pick the first instructor you're assigned. Take a couple of flights with several people because each one of them is different. Pick the one that will be best." Finding a compatible and competent flight instructor is very important especially during private pilot training because they are the ones that will instill the early routines and skills that the rest of the training will build upon. He said that having an instructor that's insightful will help build good decision-making.

## **How did training at a towered airport affect you? What did you like/didn't like?**

He said that regardless of what type of airport, you get into the mindset of communications of either towered or non-towered. When you fly into the other, it's not as natural and you would have to think through it more.

## **Is there anything you wish you did differently with your flight training?**

In the beginning, someone told him that he should take the written before he started training. He agrees with this advice. By completing ground school and the written exam before you get in the air, you can spend all your time flying and learning the skills. He also said that you should go to different airports. Going to new airports and interacting with new towers will teach you a lot about traveling to new places and keep you interested in flying.

## **How did receiving the scholarship affect you?**

The scholarship encouraged him to get started on flight training sooner. Aside from the monetary value of the scholarship, it introduced him to a lot of people within the chapter who helped him through his training and gave him advice along the way.

## **What advice would you give to someone who is thinking of applying for a scholarship?**

He said to get the written exam done. When you get the scholarship there is a deadline and you need to make sure you meet it. You can spend more time in the air instead of on the ground. It also helps your application. It shows that you're a committed and competent applicant.

## **Why did you want to fly?**

Aviation has always been fascinating to him. He really likes machines and heavy equipment, and the systems that make them function. He likes being in control of these machines. He likes the travel aspect. It can take people to far away places really fast.

## **What's your favorite part about flying?**

He loves what you get to see from high up. There's a difference between driving up I-70 vs flying through Rollins Pass. He loves the different perspectives of the world that you get to see from high above.

## **How are you using your pilot's license now?**

He is on the precision flight team for MSU. He is also just flying for fun, from coast to coast exploring the country.

## **What are your future goals?**

He currently has his Private Pilots License and an Instrument Rating. He is working on his Commercial License and is probably going to continue on to the airlines. He also wants to continue to bring more people into general aviation.

# Exploring the Wonder of Flight

EAA 43- Young Aviator 2021-22 Activities

Chapter 43 has had an active Young Aviator program since 2011 when the group started building a full-size replica of the front third of the B25 fuselage. This was an all-consuming project for the club from initial inception through completion. The project was built from the original plans and included a full duplicate of the instrument panel with gauges that would respond to the movement of controls. The finished project has been a constant at KidVenture for the last five years. There were several major updates and modifications to the project to optimize the replica ability to provide an incredible simulation of what it must have been like to sit in the cockpit, nose gunner/bombardier, or turret gunner position during WWII attacks.

At the end of Oshkosh 2021 the B25 was left at Oshkosh and the annual effort to update/fit repair the simulator was put to rest. With a stable simulation platform staying in Wisconsin, it was time for EAA Chapter 43's Young Aviator club to redefine its goals and objectives. We spent considerable time looking at other projects we could take on, but determined that our middle school and junior high Young Aviators, who were all fascinated with flight and loved a wide variety of planes, would be best served with a club focused on the Wonders of Flight by helping them make their own projects. We also determined that to be true to our Experimental Aircraft roots we would need to provide our senior high school and adults (18+) with the opportunity to build a full-size RV 12iS. Orders were placed for the empennage kit from Vans.

With the kit on order and long-term plans in place for the senior students we turned our attention to how to best develop a program where we could explore the Wonders of Flight, and at the same time allow mentors to see which students would be ready to help build the RV 12si. We decided to start with the simplest rubber band powered balsa wood models and introduce Microsoft Flight Simulator X as a tool to learn about flying. As fall 2021 progressed the models got more challenging, and the flight simulator challenges more realistic. We encouraged each kid to get a copy of the simulation program at home and a joystick controller to fly the simulator. Then for the club meetings we would set up a virtual reality (VR) headset and the new MS Flight simulator. The VR headset gave each kid an opportunity to fly destinations anywhere in the world. We had meetings where we flew over NY City or the pyramids of Egypt, just for the fun of it. In addition, we used the flight simulator training programs to create challenges for each member to see how well they could take off from an airport, fly the pattern and execute a smooth landing. The program would give a "non-bias" score of each participant's flight. This allowed an open competition where everyone could compare scores and discuss why one flight was better than another.

This mix of building and flying simulators made some of the meetings a challenge for each member to decide where they wanted to focus their time. While we never had any fights develop over usage of the simulator there were individuals who had to be told clearly that their VR flight time was up. We tried to spend some time at each meeting talking about flight. The discussions were never simply lectures because we always found that someone in the group, either a student or a mentor, had a question that pushed the knowledge of the group and often did not have a simple answer. Because we were building balsawood models, weight and center of gravity discussions were commonplace. But we also tackled flight rules, safety, flight training, decision making and flight planning.

While over all the activity of the fall semester was fulfilling it was not free of problems. It also turned out that the challenges of building "good flying" rubber band powered airplane is not a casual exercise. While there is a lot of information out on the internet, it turns out that many of the parts (particularly propellers and 'rubber motors') could only be acquired from online internet sources with long delivery times. The basic supplies are not as easy to get from local hobby stores as they were a few years ago. And while YouTube has lots of videos that show incredible flights of rubber band powered airplanes, they are not as easy to duplicate as one might think. As the fall semester drew to a close, we had to finalize plans for the spring semester. What to do next to explore The Wonders of Flight?

We quickly realized that while the rubber band power balsawood flight was a tiny and shrinking part of the hobby, the RC (remote control) hobby was flourishing and growing with the addition of drones and FPV flight (First Person View, where a video camera with transmitter is mounted on the plane and the RC pilot wears a set of goggles that allows him/her to fly the plane while watching the camera's video).

The biggest drawback to learning flying RC aircraft is the propensity for crashing and destroying planes. After a little research there were two solutions we found to address this challenge: 1) EPP foam and 2) dollar store foam board. It was determined that these were best exemplified by two companies Crash Test Hobby and Flite Test. These two companies are extremely active on the internet and have a plethora of examples of how the sport is currently being enjoyed. At <http://www.crashtesthobby.com/> you can see videos of: their planes intentionally being flown into brick walls to demonstrate their durability, their trainers in slow flight, detailed building instructions, FPV flights to mountain tops, FPV obstacle course flights, aircraft air to air combat challenges, night flights, and most importantly detailed repair instructions. At <https://www.flitetest.com/> (and their YouTube channel) you can see numerous videos of their prototyping while building everything and anything that can be made to fly. Flite Test has developed over 200 airplanes designs built out of dollar store foamboard, with free plans and instructions downloadable from their site or precut foamboard

kits - that will reduce build time by 75%. They also have episodes where they build and fly the latest 3D printed air-planes kits or even show their prototyping of a flying TANK. If you have any interest in how things fly, both of these websites are great places to start.

A pitch was made to the Mentor Leadership and a decision was made to buy five trainers from Crash Test Hobby and get geared up to let the club explore the Wonders of Flight through RC airplanes.

Our first meeting of 2022 was January 15<sup>th</sup>. It was a wild meeting with the goal of getting five planes built and ready for avionics and motors. Tasks were split up between building the fuselage, wings, or painting completed plane parts. You have never seen so much energy moving coherently to get a project off the ground. We meet in the basement of a church and while most of the building happened inside all the painting had to take place outside.

**Here are several pictures from that first week that will give you a sense of how easy it is to fill three hours will lots of activity:**



**Initial discussion about Flite Test kits**



**The building starts on Albatross kits**

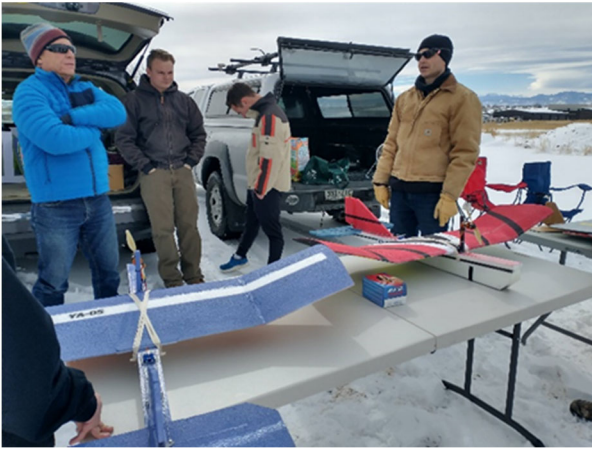


**Painting of completed parts**

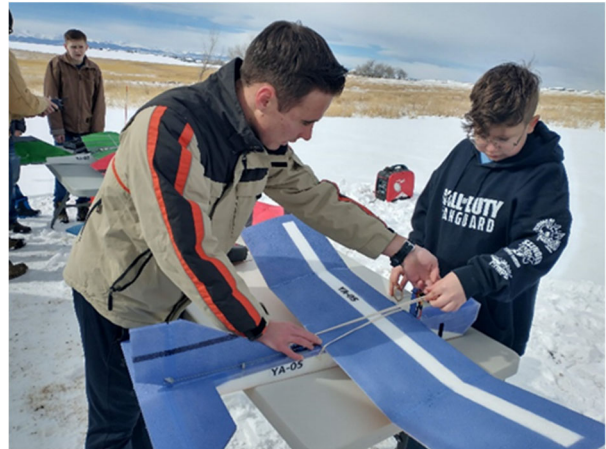


**Some of the kids take a break from building to try their hand at the simulators**

Two weeks latter we were out learning to fly the planes that were built.



**Flying RCs in the spring in Colorado**



**Assembling a polyhedral Albatross**



**Ready to launch**



**Three planes in the air each on a buddy box**

We have had one more meeting so far this year with lots of flying happening. We have almost ironed out all the challenges of keeping four planes in the air at once with three of them run by buddy boxes. All the planes are electric powered which requires that we keep a generator and chargers running all the time to keep up with the discharging of batteries.

As we move forward through the spring of 2022, we will be exploring different airfoils on our trainer fuselages and we hope to step into FPV flight if we can get enough club members flying planes without buddy boxes and ready for the challenges of FPV flight. In addition, we have encouraged individuals to build the plane of their dreams. We have one member who is retrofitting an old Cub with modern equipment to see if he can get it flying. Another member has started a Flite Test kit and we have several planes under design to build by other members. We will have builds going with foam, 3D printed plastic, foam board, and balsa wood. It promises to be a fun and exciting spring. If any of the members of EAA 43 would like to attend a meeting, we would love to have you. Just be forewarned - it is easy to be seduced by the building and flying of RCs, and the fun of testing your skills on a simulator - your view of the Wonders of Flight may never be the same. (:>)



***Want Ads & articles for publication may be sent to the editor -  
[newsletter@eaa43.org](mailto:newsletter@eaa43.org)***

### *Want Ads*

Jean-Pierre Verdier has sold his plane but still has a few items that others might be interested in:

Magnetos synchroniser \$30

Brake pad rivet tool kit \$15

Outdoor protective thread for the wing \$15

Compression kit \$40

Tube for an RV7 front wheel, brand new \$10

Contact Jean-Pierre at [eaglecliff1994@gmail.com](mailto:eaglecliff1994@gmail.com) or 303-670-5259

### **Custom Embroidery Valerie Wait**



720-352-2630

1705 Flemming Drive  
Longmont, CO 80501

email: [valandjimw@yahoo.com](mailto:valandjimw@yahoo.com)

Bill Mitchell reports that Valerie can embroider a couple of different sizes of our chapter logo on jackets, shirts, etc. Bill showed some examples at one of our gatherings, and they were beautifully done! The Gregorys had her embroider their tail art and N-number on their plane's seat cushion covers!



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Owner

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3000 Airport Drive #306  
Erie, Colorado 80516

#### NOTES:

[www.apexweldfab.com](http://www.apexweldfab.com)  
[facebook.com/apexweldfab](https://facebook.com/apexweldfab)

John was recommended to do some work on Herrill Davenport's 182 fairing, and wants to do more airplane work.

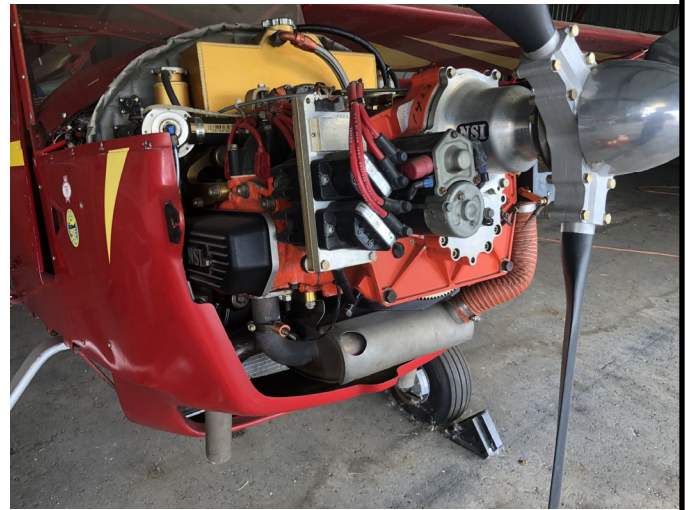
Pneumatic Cleco pliers, used for one project, \$50

Text Mike Duggan at 303-912-9038



## For Sale

Subaru NSI firewall forward for Kitfox Model IV. EA81 engine (98hp) with reduction drive, 3 blade ground adjustable prop (and electric in-flight 3 blade (NSI??) of unknown condition). Engine has 400 hours. Will sell for \$3500. Call Lynn @ (720) 289-5378 or email LVBDesign@msn.com. I haven't removed it yet but I'm very close to that. Installing a Rotax 912.



## Airdrome Aeroplanes Full-Size DR1 Project For Sale

- Fuselage built at factory
- Valley Engineering engine and propeller
- Stits poly fiber covering process
- Wings finished through color
- Fuselage covered and in silver

Asking \$25,400

Located: Erie, CO

Contact [kathrynr224@gmail.com](mailto:kathrynr224@gmail.com) or 972-765-4640





Shown in completed form, from <https://fisherflying.com/horizon1/>

## Fisher Horizon1 Kit For Sale

Ready to cover,  
Continental A80 engine included.

Contact Gregory Hall  
[flydog.gh@gmail.com](mailto:flydog.gh@gmail.com)

303-726-9109

Light weight STOL-capable two-seat tandem  
with folding wings.

Additional aircraft specifications at  
<https://fisherflying.com/wp-content/uploads/2020/05/Horizon-1-Info.pdf>

## Looking for a Project?

James Taylor (not the singer) has a seriously ill hangar partner at Front Range (KFCO) who owns a 1957 Tri-Pacer that needs a full-up restoration. If you have an interest (in buying, partnering, wrenching, etc.), James can be contacted at Bald Eagle Aviation LLC, 303-748-0231 or [baldeagleaviationllc@gmail.com](mailto:baldeagleaviationllc@gmail.com).

If you enjoyed Col Rich Graham's program on the SR-71 in May 2021, you might also be interested in his books on the Blackbird. Below are five that he has for sale on eBay. If you would like him to autograph them for you go to the eBay search and put 'sr-71pilot1974-1981' in the expanded 'Seller's ID' search. That will take you directly to his books.

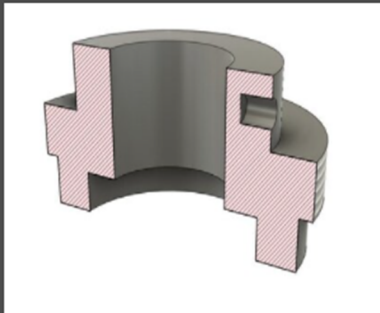


Our thanks to Col Graham and Gen Pat Halloran for the informative and fun presentation on the SR-71 in May 2021!

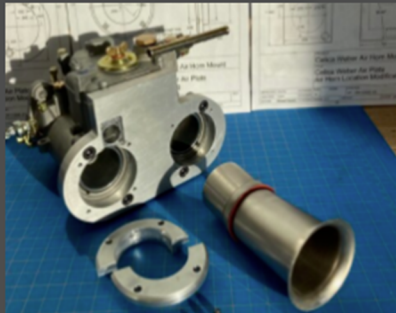


A small machine shop using a manual mill, lathe and surface grinder to offer custom machined parts to the advanced hobbyist or individual seeking support in product development or parts no longer available from a manufacturer. Shop rate is \$55 per hour, typically less than half what most shops charge. Specializing in very small quantities of parts, tools, etc. Turnaround time is one day to a couple of weeks, depending on the needs of the customer. Hansen Precision is your answer.

Contact Rich Hansen at [rlhansen@hansenprecision.net](mailto:rlhansen@hansenprecision.net) or 720-984-8293



Design



Prototype Development



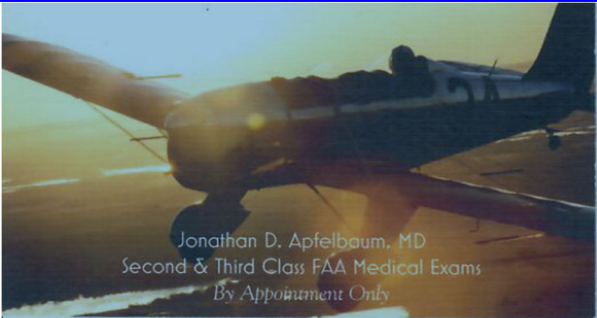
Precision Parts

**Chuck Grow Flight Instruction**

Basic Instruction, Check Rides, Bi-Annals  
Contact Chuck at 719-640-2905



No, not that Chuck!




Jonathan D. Apfelbaum, MD  
Aviation Medical Examiner  
.....  
Cell: 801-913-1211  
[jonathan.apfelbaum@gmail.com](mailto:jonathan.apfelbaum@gmail.com)

Second & Third Class FAA Medical Exams  
Vector Air FBO @ KEIK Erie Municipal Airport, Colorado

Minutes for EAA Chapter 43 Meeting  
February 12, 2022

**TONIGHT'S PROGRAM** started at 6:02pm

Dezso Molnar invented the "Gyrocycle" flying motorcycle, led America's land speed team, was an X Prize judge, and helped create the private manned space industry. He's a pilot, flight engineer, mechanic, and is now forming the "Flying Car Racing League" and building a solar-electric flying race car. He's a musician and developed hardware for the Mixman DM2 for Atari and Mattel.

Dezso showed a picture of his current electric-powered flying car from the November LA auto show, where it was showcased between the Toyota and Porsche areas. He's been working on it for 6 years. It's hangered at El Mirage, a 7-8 mile dry lake field. He's organizing an electric flying car racing league there, racing on a 10 mile loop with no range restriction (Indy is restricted). Also combined flying/driving races from El Mirage to Las Vegas. Currently planning 3 racing classes - drones, electric, and unlimited, which would include vehicles like the Taylor Aerocar, Terrafugia, and Maverick.



Dezso showed his Gyrocycle (also shown above) which was built in 7 months in 2004 and includes a folding prop in the middle. Helicopters have a complex drive system; gyros are much simpler. Mike Solano, a Texas gyro pilot, helped with issues. He started development of a two seater model (very long!) but ran out of funds.

Dezso showed a picture of his landspeed car concept - intended to break the sound barrier, but a British team pulled it off first, at \$50K per run! The Rocket Quickie Q2 costs \$12K per run! He noted that the multiple quadcopter is revitalizing flying car concepts. 2 years ago Boeing sponsored the GoFly Prize, but no one met the requirements or flew due to safety issues.

Solar powered cars can carry a maximum of 5m<sup>2</sup> of solar cells, and streamliners are fast enough to break highway speed limits. The Quickie can carry 7m<sup>2</sup>, but it's more of a derby car format than a sedan! The Zero electric motorcycle motor is more economical; the secret to the Gyrocycle is that it's based on a motorcycle - which comes with a VIN, custom frames are common, and it's easy to insure and get street legal after an inspection. It's even easier to fly than drive from an approval standpoint. The format for the Racing League is to fly in noncontrolled public airspace and drive on public roads. The plan is to get Revelation TV Network to produce coverage of the races, and he's looking for flying car owners.

Cliff Goldstein asked about the proportion of flying to driving in the races; Dezso said that as they're flying along the dry lake tracks, they'll stop to refuel then begin again at the beginning of the tracks. Electric motor performance in the winter is good; summer has issues but the races can be reformatted as desert offroad to roads. Don't have to fly if the weather is bad.

Jeff Caine noted that licensing can be complex. Jeff Holdridge asked if there are enough competitors - Dezso is trying to find a benefit for the competitors and some level of support. There's enough interest to be interesting, and TV coverage is a competitor benefit. The challenge with current rocket racing is that there are few vehicles. He likened what he's doing to the birth of NASCAR: Moonshiners boosted their cars to outrun cop cars which created a base of vehicles, then they started racing at a farm.

Dezso asked if anyone present is using a motorcycle engine or electric motor in an airplane. He noted that Red Bull racing uses a common type capable of 90 second pylon runs. El Mirage has a variety of aircraft flying simultaneously.

Jeff Holdridge asked about the LongEZE Dick Rutan tried out in the rocket racing league. First equipped with an XCOR engine (motorcycle with helium) then the Velocity Planes Armadillo engine. Dezso noted that the rocket racing league accomplished a maximum of 4 flights in one day (and no one died!) They were demonstrated at AirVenture, but ran into issues with cloud cover. "Weather permitting" has to come out of the racing league.

Cliff Goldstein asked Bill Mitchell if he was ready to fly one of these - Yes! He has flown an electric (less than 20min flight time). Electric motors have no degradation at altitude. Dezso wants to race city-to-city, and try a start in Peru at 17,000 ft altitude. Cars are getting heavier (destroying road surfaces). Light car/plane is 8X better. He asked if the plane Bill flew was an LSA - Bill said electric motors are compatible with LSA, the plane just has to have a fixed-pitch prop. Dezso pointed out that ASTM (which is currently a publishing company) requirements keep alternate motors off aircraft. Earthstar ultralights use the Zero engine. Dezso said the gyro prop is an energy hog, not good for electric.

Jeff Caine noted that that under MOSAIC, LSA allows electric motors. Someone asked if flying cars have to meet crash safety requirements, that's why "motorcycle" is better than "car".

Someone asked about event insurance for racing - Sponsorships! AutoZone wanted to help with the land speed attempt (that vehicle is at Wings Over the Rockies, BTW); they invested \$2M and a \$79 battery! "Car" allows landing and driving if the weather gets bad. Cliff Goldstein suggested starting with a motorcycle and work up. Jeff Caine told Dezso about Longmont's Taylor Aerocar and he asked for contact info.

Tonight's presenter can be contacted at [flyingCarRacing@gmail.com](mailto:flyingCarRacing@gmail.com) or see the website at [flyingCarRacing.com](http://flyingCarRacing.com).

**VISITORS, NEW MEMBERS** – Please UNMUTE YOUR MIC and introduce yourself! During the upcoming break, sign our virtual signup sheet by opening a private chat in Zoom with Val's iPad and sending your email, phone # & if you're already an EAA member, your member number. You'll have a six-month trial chapter membership! (FREE!)

Matt Langer is interested in building and found Chapter 43 on the web. Jeff Caine told him about some of the chapter builders.

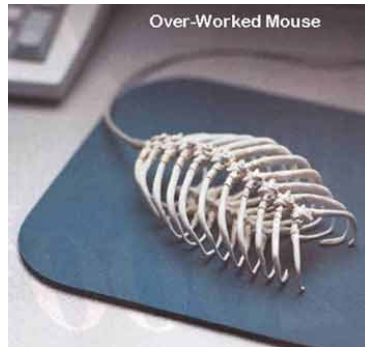
Jeff Holdridge has visited before and is getting started on rebuilding a neglected LongEZE.

Jeff Caine and Bill Mitchell talked about LSA requirements for one-off designs, gotta find the right DAR!

After the break, the meeting opened at 7:11 by Cliff Goldstein

**ANECDOTE** – Cliff Goldstein

New Computer Upgrades (a sampling)



**MEETING DEDICATION** –

This one's going to the scholarship committee for the long hours sorting 😊 through many candidates. Thank YOU! Our Greatest asset are the People that make Chapter 43 what it is today.

**TRIP REPORTS** - Where have you been, Greeley or maybe the beach? We've had a couple of members that went to Oshkosh. What about you???

Stephanie Wells got her RV-7 back in January (after a runway incident at AirVenture by the plane's co-owner). John Reading and Steph flew her C-182 to OSH to pick it up in a weather trough. John flew the 182 home and Stephanie test flew the RV-7, smelled fuel, landed, and as soon as she'd cleared the runway, the engine died and wouldn't restart. Mechanics came out and tried to restart and found a fuel leak (only 5 gallons left out of 20) due to a loose nut! Once that was torqued and thread locked, Stephanie flew home at 500' AGL to avoid headwinds. Cliff Goldstein noted that he enjoys low level flight from OSH!

Cliff G. asked Jeff Caine about his flying from Erie; he's been taking lots of daytrips.

Stephanie and Cliff G. talked about issues with planes not flying straight when up north; Stephanie said hers did fine, even if not quite straight, even in aerobatics. Cliff asked Bill Mitchell about that electric plane - the owner ended up crashing it - and Bill noted that he had seen a rubber band driven plane at Longmont that used a tractor to wind up the rubber band. It never actually flew (probably why the owner's still alive).

Larry Earnshaw asked if Stan Specht's been flying - twice so far this year, both times to Greeley.

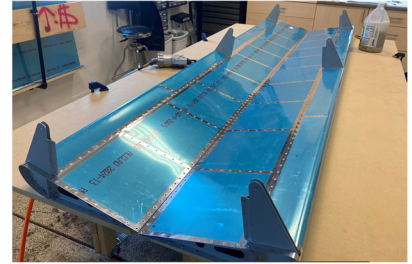
Matt Langer is planning on getting his pilot's license, would appreciate a ride if anyone would like a passenger. He's an electric controls tech at Coors, and a former Blackhawk crew chief. He's considering a Kitfox or RV. Cliff G. suggested a trip to AirVenture.

**PROJECT REPORTS** - What are we building? The delivery of the RV12 for YA build is around the corner. We've got our build space about laid out. Our Elephant is about to walk in the door. What are you working on???????? (Send Val PROJECT pictures for the newsletter at newsletter@eaa.43.org)

Michael Savino got to fly with Cliff G. in his RV-14 and really appreciated it. He also thanked Jeff Jones for the tour of his plane's wiring harness. Michael is installing his bottom wing panels following a video tech inspection by Jim Sutton. His harness kit is coming soon, with the engine kit scheduled to arrive in April. Soon he'll need 7-8 people to help move his project from the basement to the garage (for pizza and beer, of course).

Cliff Hasenbalg - working on the Comp Air 7 turboprop firewall forward fuel plumbing. The owner is currently in the hospital undergoing cancer treatment. The plane is 90% done with 90% to go! Cliff is impressed by the strength of the composite, but it takes longer!

Cliff Goldstein showed a picture of Mike Gilbert's RV-10 flaps. →



**SAFETY REPORT** – Words of Wisdom from our Experts.

Have you considered The Inogen One-5 Supplemental Oxygen to replace that O2 bottle? Discussion on this product. Larry Earnshaw showed his system to Cliff G., then Cliff bought a used system for \$1500. It's very nice not to have to refill tanks! Bill Mitchell noted that individual acclimation is the biggest factor. Larry said while flying his 82 year old mom to Nebraska, the Inogen system kept her VO2 levels good. Bill said Mary showed no signs of hypoxia on her first mountain flight. Cliff G. says he notices a difference with O2; Bill noted that some folks can't tell when they're in trouble. Stephanie suggested the FAA's PROTE to figure out what your symptoms are. She said that PROTE is different from the military test; PROTE increases nitrogen levels rather than creating a vacuum. She also said that civilian use of the military test isn't supported anymore. Cliff G. said he'd recently been at 18K on oxygen, on top of cloud cover, and the oxygen helped him stay very alert.

When you're doing those annuals, be sure to clear not just the prop but all the debris not nailed down when you do that run up. Did you leave a tool up on the cylinders???

Larry Earnshaw said that at his recent annual, his A&P did a tool count and found the missing tool inside the engine cowling.

Have you seen the FAA report on increased laser flashing of aircraft?

### **FLIGHT ADVISORS**

If you're considering a new bird in the nest, a flight advisor could help in the transition from the previous owner to your check out with your favorite CFI.

Hooking up to a battery charger and spending a few hours just staring at the panel is a good way to learn where all those important buttons are. Start pushing and creating muscle memory. Bill Mitchell noted that glass panels are problematic; need to check it out thoroughly on the ground before starting the engine. (And don't forget about wheel pants in winter!)

### **YOUNG EAGLES** – Cliff Hasenbalg

Next Rally: In the Spring (almost!) March 19! Registration opens February 19 at 12:01pm to hopefully cut down on no-shows. This will be the 30th anniversary of Young Eagle; let's do 30 pilot flights to celebrate! Cliff H. has registered for annual insurance that will also cover breakfast at the events. PLEASE GO TO [youngeaglesday.org](http://youngeaglesday.org) for training and a background check!

### **YOUNG AVIATORS** – Jeff Jones/Mike Sutton

YA has been busy building Remote Control aircraft. The kids are hard at work building and flying their own RC's. It's not just for YA, and it's very addicting. If you're looking for a different aberration of aviation, give Jeff or Mike a call.

Trice McEwen said it was a little cold, but fun! The kids have learned a lot! About 15 kids in attendance have hand-built RC planes from plans. It takes a lot of time to build, but it's lots of fun. Adults are welcome! And if you haven't read Jeff's article on page 6, you really should!



**SCHOLARSHIP** – Jenny and Mike Sutton (not on but Trice was)

Scholarships have been awarded...Time to tell the Story.... Mike and Jenny Sutton and the rest of the committee have made their selections. Ok what happened??

2 camp scholarships and 4 aviation scholarships have been awarded with 8 candidates interviewed. Trice said there were lots of great applicants.

**VMC/IMC UPDATE**

Progress report, anyone present give a recap of the meetings events.

IMC has been talking about icing conditions; their next meeting is on the 4th Thursday of February. Stephanie said the IMC meetings usually have 6-8 attendees. Cliff G. noted that meetings are so much better live than online! He noted that other local chapters are ding IMC/VMC too.

VMC will meet next Tuesday (Feb 15). Cliff G. said the meetings involve a lot of hangar flying, they're fun! Bill Mitchell said that the topics lead to new questions. He loves that Kirk Brennan hosts the VMC meetings and would like more participation.

VMC/IMC Joint meeting with Radek has been cancelled. Andre' is trying to resurrect this meeting and we look forward to meeting the Radek.

**CHAPTER FINANCE REPORT**

The Chapters books are always open for members that want more detail. Contact Myles for more information or to review the books. Myles noted that it's time to start fundraising for the 2023 scholarships!

**NEW/OLD BUSINESS**

Cliff Goldstein's start of Pancakes at Erie got slowed by Covid but he hasn't forgotten his commitment...and Bobbi bought a big electric griddle!

Our own John Kellogg is working on our Social Blog and is looking for content, along with pictures. Let's take a picture of our Pride and Joy and forward to John so he can begin publishing pictures of your ongoing project. (see article on page 4).

Jim Wood is heading up Membership follow up. Cliff Goldstein received a call regarding not getting a notice of cancellation for the Banquet only to find the member hadn't paid dues since 2014. Help us to get caught up and follow up on our membership.

The Banquet is tentatively scheduled for the second Saturday in April. Here's hoping we can pull it off over COVID. Stan Specht said the entertainment if booked. Bill Mitchell asked if attendees had to be members (nope!) He has 5 guests he'd like to bring, and Stephanie recommended the website (<https://chapters.eaa.org/ea43/banquet>).

**ANYTHING ELSE?**

Jim Sutton said no one is using the tool crib! Why buy tools you'll only use for one project when you can borrow? See the link at the bottom of the Chapter homepage (<https://chapters.eaa.org/ea43>).

Stan Specht has the AirVenture Memorial Wall video (20 min) and would like to show at the March meeting; RMMA Director Paul Anslow would also like to present RMMA current and future plans. Signature Air is offering space for chapter meetings and projects; Stan Specht and John Evens will check them out. And the new RMMA office lead is Kimberly.

Cliff Hasenbalg asked if the machine shop advertised in the Newsletter is any good; Bill Mitchell confirmed.

Meeting closed at 8:14pm

Respectfully submitted,  
Val Gregory  
EAA Chapter 43 Secretary



## Membership Enrollment Information

(Needed for Current Roster & Chapter Correspondence)



**MANDATORY INFORMATION:** *If nothing has changed from last year, this is all the information required. We need EAA Membership # and EAA Renewal date to comply with EAA Charter and Chapter 43 by-laws.*

Date: _____	Annual Dues or	\$25.00
Name: _____	Save! 5 years for	100.00
National EAA Membership #: _____	Scholarship Donation (Optional)	<u>    .00</u>
EAA Membership Renewal Date: _____	Total	.00

Are you a:

Technical Counselor	Yes ___ No ___
Flight Advisor	Yes ___ No ___
CFI	Yes ___ No ___

*Scholarship donations are tax deductible.*

*Please make check(s) payable to:  
EAA Chapter 43  
P.O. Box 1725  
Broomfield, Co. 80038-1725*

**NEW MEMBERS PLEASE COMPLETE - RETURNING MEMBERS OPTIONAL INFORMATION:** *Supply any information that may have changed from previous year (if you want a field deleted from your record, please tag it).*

E-Mail Address: _____	Home Phone: _____ - _____ - _____
Spouse: _____	Cell Phone: _____ - _____ - _____
Street: _____	
City, State, and Zip: _____	

### **HOW WOULD YOU LIKE TO BE INVOLVED IN THE CHAPTER?**

Participate in Young Eagles functions, either as pilot or volunteer?	Pilot	Yes ___ No ___
	Ground Crew	Yes ___ No ___
Arrange, Or Be, The Program For One Of Our Meetings? -----		Yes ___ No ___
Host A Chapter Meeting At Your Project? -----		Yes ___ No ___
Run for a Chapter Officer Post? -----		Yes ___ No ___
Interested in attending hands-on workshops (under consideration)		Yes ___ No ___

### **AIRCRAFT INFORMATION:**

Note: Status: ---Built, Building, Restoring, Considering, etc.

<u>Make, Model</u>	<u>Status</u>	<u>Based At</u>
_____	_____	_____
_____	_____	_____

*To keep costs down the monthly newsletter is delivered via E-Mail (unless otherwise requested). We also send out periodic news items by e-mail.*

## **2022 Chapter Officers**

<b>President</b>	Cliff Goldstein	720-280-2916
<b>Vice President</b>	Larry Earnshaw	720-425-7987
<b>Vice President</b>	Stephanie Wells	303-503-0147
<b>Secretary</b>	Val Gregory	303-908-1252
<b>Treasurer</b>	Myles Lee	720-295-8778

### **Board of Directors**

Cliff Goldstein (Chair)  
 Kirk Brennan\*  
 Steve Paschke\*  
 Will Heltzel\*\*  
 Chuck Kubin\*\*

Alternate Directors  
 Mike Gilbert  
 Pete Watkins

(Note: \*- 2 year terms expire end of 2022, \*\*- 2 year terms expire end of 2023)

### **Volunteer Officers**

<b>Technical Counselor</b>	Jim Sutton	303-598-4205
<b>Technical Counselor</b>	John Reuterskiold	303-881-3517
<b>Technical Counselor</b>	Phil Brown	303-506-3886
<b>Technical Counselor</b>	Stewart Bergner	303-229-7799
<b>Technical Counselor</b>	Will Heltzel	303-345-5784
<b>Flight Advisor</b>	Bill Mitchell	303-427-4025
<b>Newsletter Editor</b>	Val Gregory	303-908-1252
<b>Young Eagles Coordinator</b>	Cliff Hasenbalg	303-359-2758
<b>Young Aviators Coordinator</b>	Jeff Jones	303-809-3994
<b>Young Aviators Advisor</b>	Andy McRae	303-330-3825
<b>Young Aviators Advisor</b>	Scott Serani	303-358-2858
<b>Young Aviators Advisor</b>	Mike Sutton	303-515-5269
<b>Membership Chair</b>	Jim Wood	720-314-9663
<b>Data Base Editor</b>	Tim Stansbury	719-494-7398
<b>Web Master</b>	Steve Paschke	720-236-7869
<b>Social Media Coordinator</b>	John Kellogg	720-300-0202
<b>Safety Officer</b>	Stephanie Wells	303-503-0147
<b>Refreshments</b>	John & Roxie Juul	720-626-7707
<b>Audio/Visual</b>	Herrill Davenport	303-460-7789
<b>Scholarship Chairs</b>	Mike & Jenny Sutton	720-515-5269
<b>Scholarship Fundraising</b>	<b>(Volunteer Needed)</b>	
<b>IMC Club Coordinator</b>	Larry Earnshaw	720-425-7987
<b>VMC Club Coordinator</b>	Andre' Smith	720-270-5944

### **CFI's in Chapter 43**

Phil Brown	303-506-3886	Bill Mitchell	303-427-4025
Mark Davis	303-425-4080	Tom Shaw	303-275-0904
Chuck Grow	719-640-2905	Mike Sutton	303-515-5269
Jeff Hinkle	303-550-2291	Stephanie Wells	303-503-0147

## *Mile High EAA Chapter 43*

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*Mile High Flyer*  
*EAA Chapter 43*  
*P.O. Box 1725*  
*Broomfield, CO 80038-1725*

**First Class**



**Gatherings are normally held on the second Saturday of each month at 6:00 P.M.—Location determined monthly. See Page 2 for details of the upcoming gathering.**